

CALLISTER NEBEKER & McCULLOUGH

A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
GATEWAY TOWER EAST SUITE 900
10 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84133
TELEPHONE 801-530-7300
FAX 801-364-9127

LOUIS H. CALLISTER
GARY R. HOWE
L.S. McCULLOUGH, JR.
FRED W. FINLINSON
DOROTHY C. PLESHE
JOHN A. BECKSTEAD
JEFFREY N. CLAYTON
JAMES R. HOLBROOK
W. WALDAN LLOYD
JEFFREY L. SHIELDS
RICHARD T. BEARD
STEVEN E. TYLER
CRAIG F. McCULLOUGH
GEORGE R. SUTTON
RANDALL D. BENSON
GEORGE E. HARRIS, JR.¹
T. RICHARD DAVIS
PAUL H. SHAPHREN
DAMON E. COOMBS
BRIAN W. BURNETT
CASS C. BUTLER

LYNDA COOK
JOHN H. REES
MARK L. CALLISTER²
P. BRYAN FISHBURN
MARTIN R. DENNEY
JAN M. BERGESON
LAURIE S. HART
WILLIAM H. CHRISTENSEN
GLEN F. STRONG³
JAMES D. GILSON⁴
CRAIG T. JACOBSEN
JOHN B. LINDSAY
DOUGLAS K. CUMMINGS
ZACHARY T. SHIELDS
CYNTHIA J. CRASS
JEANENE F. PATTERSON⁵
DAVID R. YORK
LEE S. McCULLOUGH, III
JENNIFER WARD
SCOTT B. FINLINSON
LEONARD J. CARSON

¹ ALSO MEMBER MISSOURI BAR
² ALSO MEMBER CALIFORNIA BAR
³ ALSO MEMBER ILLINOIS BAR
⁴ ALSO MEMBER COLORADO AND WASHINGTON D.C. BARS
⁵ ALSO MEMBER NEW YORK AND DELAWARE BARS

OF COUNSEL
LUCY KNIGHT ANDRE
EARL P. STATEN

LOUIS H. CALLISTER, SR.
(1904-1983)
FRED L. FINLINSON
(1906-1995)
RICHARD H. NEBEKER
(1924-1998)

TO CALL WRITER DIRECT
(801) 530-7428
brianburnett@cnmlaw.com

July 18, 2000

HAND DELIVERED

Pam Grubaugh-Littig
Division of Oil Gas & Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, UT 84114-5801

Re: Sunnyside Cogeneration Associates - Permit No. ACT/007/035

Dear Pam:

As we discussed, Sunnyside Cogeneration Associates ("SCA") is proposing to conduct a test burn of approximately 1500 tons of coal tar material to be mixed with waste coal from SCA's facility. I have enclosed a copy of a document entitled, "Sunnyside Cogeneration Power Plant Alternative Fuels Test Burn", which describes in more detail the proposal. I have also enclosed for your review an Experimental Approval Order for Test Burns Involving Coal Tar Blends - Carbon County, CDS-A1, TITLE V, from the Utah Department of Environmental Quality, Division of Air Quality ("DAQ"). As you will note, DAQ has given SCA approval to conduct the test burn.

Originally, the coal tar material was going to be provided from a Utah source for the test burn. SCA currently plans to utilize coal tar material from another state. This material will be shipped by truck to SCA and dumped into the mixing hopper and blended with waste coal from the SCA site. SCA's permitted area should not be impacted by this test burn.

RECEIVED

JUL 21 2000

DIVISION OF
OIL, GAS AND MINING

Pam Grubaugh-Littig
July 18, 2000
Page 2

Thank you for your cooperation in this regard. If you have any questions, please feel free to contact me.

Sincerely,

CALLISTER NEBEKER & McCULLOUGH

A handwritten signature in black ink, appearing to read "Brian W. Burnett", with a long, sweeping horizontal line extending to the right.

Brian W. Burnett

BWB:ias
Enclosures

cc: Jim Willey
Bruce Davis
Rob McLeese
Kendall Reed
Randy Scott
Rusty Netz



DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY

Michael O. Leavitt
Governor

Dianne R. Nielson, Ph.D.
Executive Director

Ursula Kramer
Director

150 North 1950 West
P.O. Box 144820
Salt Lake City, Utah 84114-4820
(801) 536-4000 Voice
(801) 536-4099 Fax
(801) 536-4414 T.D.D.
Web: www.deq.state.ut.us

July 11, 2000

DAQE-418-00

James Willey
Sunnyside Cogeneration Associates
250 West Pratt Street, 23rd Floor
Baltimore, MD 21201-2423

Dear Mr. Willey:

RE: Experimental Approval Order for Test Burns Involving Coal Tar Blends
Carbon County, CDS-A1, TITLE V

Your request for an Experimental Approval Order (AO) dated May 10, 2000, was received by the Utah Division of Air Quality (DAQ) on May 15, 2000. In your letter you requested approval for conducting test burns of coal tar blends at the Sunnyside Cogenerating Station located in Carbon County, Utah.

Abstract: *Sunnyside Cogeneration Associates operates an electric power plant near Sunnyside, Utah. The Sunnyside plant is a waste coal-fired steam electric generating plant located in Carbon County. The plant currently operates under the Approval Order (AO) DAQE-691-99, dated August 13, 1999. Sunnyside is requesting approval to test burn a mixture of coal tar and waste coal. The initial feed rate of coal tar would be approximately 5% of the total coal feed rate input. If feasible, the feed rate of coal tar would be increased incrementally up to 25% of total input to the boiler. Environmental parameters would be monitored and collected via CEMs to assure compliance with the AO. This temporary operation would not cause an exceedance to the AO limits. A report would be provided to the Division of Air Quality documenting the results and conclusions of the test burns.*

Your request has been evaluated and found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307) and the Utah Air Conservation Act. This Experimental Approval Order authorizes the project with the following conditions and failure to comply with any of the conditions may constitute a violation of this order:

Approval for trial test burns of coal tar blends is hereby granted in accordance with Section 19-2-107 (2)(e) of the Utah Air Conservation Act under the following conditions:

DAQE-418-00

Page 2

1. Trial test burns using coal tar blends shall only be performed in the main boilers at the Sunnyside Cogeneration Associates Power Plant located in Carbon County, Utah.
2. The trial test burns of coal tar blends shall not be performed more than 180 calendar days from the date of this Experimental Approval Order (AO).
3. Not more than 1,500 tons of diluted coal tar shall be burned during this 180 day time period.
4. The coal additives shall only consist of diluted coal tar.
5. The average quantity of coal tar additives blended with waste coal for burning during a test shall not be more than 25% of the total coal burned during a calendar day.
6. All requirements of the AO DAQE-691-99 dated August 13, 1999, shall be adhered to. This Experimental AO does not give approval to violate any conditions that limit emissions of air contaminants in the AO DAQE-691-99, and the UAC R307.
7. The trial test burns of coal tar blends shall be terminated if the emissions and/or opacity limits listed in the AO, DAQE-691-99 are exceeded.

A report describing the results of the trial test burns shall be submitted to the Executive Secretary, Utah Air Quality Board, Attention: New Source Review Section, within 90 days after the project is completed. The report, at a minimum, shall include the emissions measured by the Continuous Emissions Monitors, laboratory analysis of the coal tar blends, the parameters recorded as outlined in the Notice of Intent received by the Division of Air Quality on May 15, 2000, and emissions of any of the 188 Hazardous Air Pollutants listed in the 1990 Clean Air Act Amendments reasonably expected to be caused from the combustion of the coal blends.

The Division of Air Quality does not endorse the products, chemicals, or equipment used in this Experimental AO.

The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. Unless you have comments which would require additional work, the fee for this AO will be approximately \$800.00. An invoice will follow.

If you have any questions on the Experimental Approval Order conditions, please contact Nando Meli at (801) 536-4052.

Sincerely,

Ursula Kramer
Ursula Kramer, Executive Secretary
Utah Air Quality Board

UK:NM:aj

cc: Emery County District Health Department

SUNNYSIDE COGENERATION POWER PLANT ALTERNATIVE FUELS TEST BURN

Introduction

At Constellation Operating Services Incorporated (COSI), we are investigating the use of alternative fuels at the Sunnyside Cogeneration Plant, and are seeking a permit from the Utah State Department of Environmental Quality for conducting a test burn of coal tar, one of the proposed alternative fuels.

- Coal tar is a by-product of manufacturing that can be safely destroyed by blending it with coal and burning it in boilers.
- By burning alternative fuels in addition to waste coal, we can extend the life of the existing coal reserves.
- It is environmentally responsible to swiftly destroy these wastes rather than allowing them to slowly degrade in a landfill.
- Landfill space for materials excavated in environmental cleanup projects is scarce and siting new ones is difficult.

The Test Burn

During the test burn, COSI will add coal tar material to the waste coal at the site. The mixed material will be incinerated under normal operating conditions at the Sunnyside facility. In accordance with state regulations, COSI will conduct testing on the ash during the test burn period to determine any change in output.

An experimental permit will be required because this is the first time this technology has been used in Utah, although it has been successfully employed in other states. It is anticipated that the results will demonstrate to COSI and the United States Environmental Protection Agency (USEPA) that this technique can be used without significant changes to power plant operations, and without threatening the welfare of the environment or the health and safety of the employees and the community.

What's In the Alternative Fuel Material?

The material consists of coal tar, produced as a by-product of manufactured gas processes. Through toxic characteristic leaching procedure (TCLP) analysis, it has been determined that the coal tar contains low levels of benzene – less than 0.130 ppm. The U.S. Occupational Safety and Health Administration (OSHA) has established the permissible exposure limits (PEL) of benzene in the air at 1 ppm. Due to the low benzene levels in the materials, it is expected that benzene in the air will be well below the OSHA PEL; however, air monitoring will be performed to verify that site workers are not exposed to benzene and other constituents above the OSHA permissible exposure limits.



What Is Coal Tar?

Coal tar is a by-product of coking and of manufactured gas plants that were operated in many towns during the 19th and early 20th centuries. Coal tar is used safely in asphalt and roofing tar, even though it contains benzene, which OSHA considers to be a carcinogenic substance. However, the concentration of benzene in the coal tar material that will be used for the test burn is very low – near 0.130 ppm. OSHA's occupational exposure limit for benzene is 1 ppm.

Benzene is an aromatic hydrocarbon and is often found in association with another class of chemicals called polycyclic aromatic hydrocarbons (PAHs). PAHs are a group of chemical compounds that result from both natural and manmade sources, and have a detectable odor. PAHs are also a component of coal tar. Most PAHs are created as a result of incomplete combustion of such materials as oil, gas, coal, wood, diesel fuel, and gasoline.

The most common and odorous PAH associated with the coal tar material is naphthalene. Naphthalene has a low odor threshold (0.000039 ppm) and can be smelled at concentrations far below levels that are considered dangerous to health. OSHA's occupational exposure limit for naphthalene is 10 ppm. The odor threshold is one thousand times lower than the permissible exposure limits for naphthalene.

We do not anticipate the odor of naphthalene will be detectable in the neighboring communities of East Carbon and Sunnyside during the test burn, however, we are asking anyone who thinks they smell something unusual or out of the ordinary to make a note of the time, date and location and report this information through the COSI Hotline at 435-888-4478.

How Can We Be Sure What The Coal Tar Material Contains?

The material will be tested before shipping. In addition, samples of the material will be collected for laboratory analysis when the trucks arrive at the Sunnyside facility to compare with the information provided by the shipper before shipment.

Why Burn It?

The American utility industry is involved in the environmental cleanup of numerous industrial sites. Millions of cubic yards of soil impacted by the release of coal tar, crude oil, gasoline, diesel fuel, and other fossil fuel products must be excavated and managed offsite in these cleanup projects.

The USEPA believes the best way to clean up these sites is to use a method that permanently reduces or removes threats to health and the environment. Along with the agencies, we have concluded that co-burning these cleanup materials with coal in utility boilers makes a lot of sense. Not only does incineration completely destroy coal tar in a safe and effective manner, it also provides a source of alternative fuel for generating electricity.

There are many sites in Utah where coal tar was stockpiled as a by-product of steel manufacturing. The coal tar used in this test burn will come from a Utah source, and is a byproduct of smelting operations, which used some coal that came from the Sunnyside



Mine. By incinerating this solid waste, we are generating electricity for today's needs, and helping to clean up Utah's environment for future generations.

Protection of Health and the Environment

The wastes that the Sunnyside Cogeneration Power Plant will process are legally classified as special non-hazardous waste. Wastes produced by the manufacturing and service industries, including contaminated soil from spills and leaking tanks, are in this category.

Soil contaminated with fuel oil or coal tar may not be regulated as a hazardous material, but it does contain chemical compounds that are considered hazardous substances. However, when considering the level of risk to health from such wastes, it is important to think about not only hazardous characteristics, but also the potential for exposure. If the harmful constituents of this soil are destroyed by burning it in a boiler, this waste is no longer a threat. COSI wants to provide a safe, effective, and permanent solution to eliminate any potential risk.

What Will Happen During the Test Burn at the Sunnyside Cogeneration Power Plant?

The material we will use for the test burn will come from a Utah source. About 1,500 tons of coal tar material will be shipped by truck to the Sunnyside facility during the approximate 21-day test period.

When the coal tar material arrives at the Sunnyside facility, it will be dumped into the mixing hopper and blended with waste coal from the Sunnyside site. The blended material will then be transported on a conveyor system to a crusher where it will be reduced in size to prepare it for incineration. The blended, reduced material will then be conveyed to the plant silos, where it will be stored until it is incinerated in the Sunnyside boiler under standard operating conditions.

How volatile is the alternative fuel material?

The flashpoint of the *raw* coaltar is between 218 and 250 degrees Fahrenheit. The flashpoint of the *mixed* alternative fuel material will likely be even higher, due to the diluted concentrations of coaltar in the alternative fuel material. At this low level, it is unlikely that the mixed material would explode or be set off by a spark.

How Will the Coal Tar Material be Transported?

The test-burn material will be transported to the Sunnyside facility as a bulk material in covered trucks during regular business hours. The trucks will come by interstate highway, using I-15, SR6, and SR123 to approach the plant. The shipments will increase the average number of incoming trucks per day by two during the test burn. The number of trucks hauling ash would remain the same.

Traffic accidents involving trucks delivering shipments to the Sunnyside Plant would be handled by law enforcement and emergency response agencies like any other such incident.



In the event of a material spill due to an accident, the cleanup will be handled following U.S. Department of Transportation requirements. This would be similar to any other trash-type spill and would require no special emergency response. A contractor who is insured and bonded will be engaged to perform any necessary cleanup in case of an accidental spill. Truck drivers will have a 24-hour emergency response telephone number on the shipping manifest if a spill should occur.

Health and Safety Program

A Health and Safety Plan has been developed to address employee safety. The safety plan is designed to minimize the exposure to employees of any harmful substances. In addition, the coal tar material is carefully analyzed before it is shipped. It will be sampled and tested again when it arrives at the Sunnyside facility to further reduce any risk to the health and safety of the workers and general public.

Air Quality Monitoring

Air Quality monitoring will also be conducted during the test burn to provide data reflecting the safety results. Real-time testing and weighted-average sampling will be conducted on the ground at the plant during the test-burn to assure the safety of workers and the general public. No off-site monitoring is planned at this time, as the real-time monitoring nearest the source would reveal any harmful conditions.

Will Burning Coal Tar Add New Contaminants to the Stack Emissions?

No. Emissions from the test burn will not contain pollutants different than the existing emissions. Because the Sunnyside boiler burns at a temperature in excess of 1,600 °F, the coal tar material would be efficiently incinerated. The test burn emissions will include the same pollutants currently emitted by the stack: SO₂, NO_x, CO, CO₂, and fine particulate matter. Furthermore, the air model currently used to track emissions shows that the stack emissions discharge beyond the communities of East Carbon and Sunnyside. Consequently, we anticipate no change in the chemical composition or discharge distance of the stack emissions.

Will Burning Coal Tar Add Any New Contaminants to the Ash?

It is anticipated from operations at other similar plants, that the ash will remain the same in chemical composition and total amount produced. No change in ash constituents is expected as a result of the burning coal tar, but the ash produced from the test burn will be sampled and analyzed in a laboratory to demonstrate that no harmful constituents remain. It will take seven to ten days to analyze the samples of ash.

The ash will be disposed of in the existing landfill site, according to normal procedures. Trucks will transport the ash to the landfill and it will be treated the same as the existing ash. The trucks will remain uncovered to allow steam and heat to disperse from the watered



ash. COSI is also improving operations at the plant to help reduce the total amount of ash that is produced.

Plans for the Future

Once the test burn is completed, and if the results meet COSI's stringent health requirements, we intend to establish a more permanent operation at the Sunnyside facility to accept coal tar and coal tar-impacted soils from Utah sources. Long-term operations will require more sophisticated material storage and processing facilities, as well as an ongoing health and safety program to ensure that employees and the environment are protected. A long-term transportation plan will be developed once the test-burn is over.

Additional Information

If you have questions or concerns, don't hesitate to call our information line at (435) 888-4478, and Randy Scott, Sunnyside Cogeneration Associates Plant Manager, will respond to your call. Our first and foremost concern is and will continue to be the health and safety of our employees and our community.

COSI is developing a mailing list of citizens and other interested parties to send informational mailings, including the results of the test burn. If you would like to receive further information about the test burn, or would like to be notified of any upcoming opportunities for participation, please call the number above.



TRANSACTION REPORT

P. 01

JUL-19-2000 WED 09:32 AM

FOR: OIL, GAS & MINING

801 359 3940

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	M#	DP
JUL-19	09:29 AM	14356135828	3' 07"	9	SEND	OK	234	

TOTAL : 3M 7S PAGES: 9

Post-it® Fax Note 7671		Date 7-18-2000	# of pages 9
To Steve	From Pam		
Co./Dept. PFD	Co.		
Phone #	Phone #		
Fax #	Fax #		

CALLIS & Mc

A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
GATEWAY TOWER EAST SUITE 900
10 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84133
TELEPHONE 801-530-7300
FAX 801-384-9127

July 18, 2000

OF COUNSEL
LUCY KNIGHT ANDRE
EARL P. STATEN
LOUIS H. CALLISTER, SR.
(1904-1983)
FRED L. FINLINSON
(1908-1995)
RICHARD H. NEBEKER
(1924-1998)

TO CALL WRITER DIRECT
(801) 530-7428
brianburnett@cnmlaw.com

LOUIS H. CALLISTER
GARY R. HOWE
L.S. McCULLOUGH, JR.
FRED W. FINLINSON
DOROTHY C. PLESHE
JOHN A. BECKSTEAD
JEFFREY N. CLAYTON
JAMES R. HOLBROOK
W. WALDAN LLOYD
JEFFREY L. SHIELDS
RICHARD T. BEARD
STEVEN E. TYLER
CRAIG F. McCULLOUGH
GEORGE R. SUTTON
RANDALL D. BENSON
GEORGE E. HARRIS, JR.
T. RICHARD DAVIS
PAUL H. SHAPHREN
DAMON E. COOMBS
BRIAN W. BURNETT
CASS C. BUTLER

LYNDA COOK
JOHN H. REES
MARK L. CALLISTER
P. BRYAN FISHBURN
MARTIN R. DENNEY
JAN M. BERGESON
LAURIE S. HART
WILLIAM H. CHRISTENSEN
GLEN F. STRONG
JAMES D. GILSON
CRAIG T. JACOBSEN
JOHN B. LINDSAY
DOUGLAS K. CUMMINGS
ZACHARY T. SHIELDS
CYNTHIA J. CRASS
JEANENE F. PATTERSON
DAVID R. YORK
LEE S. McCULLOUGH, III
JENNIFER WARD
SCOTT B. FINLINSON
LEONARD J. CARSON

ALSO MEMBER MISSOURI BAR
ALSO MEMBER CALIFORNIA BAR
ALSO MEMBER ILLINOIS BAR
ALSO MEMBER COLORADO AND WASHINGTON D.C. BARS
ALSO MEMBER NEW YORK AND DELAWARE BARS

HAND DELIVERED

Pam Grubaugh-Littig
Division of Oil Gas & Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, UT 84114-5801

Re: Sunnyside Cogeneration Associates - Permit No. ACT/007/035

Post-it® Fax Note 7671		Date 7-18-2000	# of pages 9
To Steve	From Pam		
Co./Dept. PFD	Co.		
Phone #	Phone #		
Fax #	Fax #		

Grubaugh-Littig (Copy/Paste)
LAW PFD